

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

ORDER NO. R2-2007-0065

**TERMINATION OF NPDES PERMIT NO. CA0004979
AND WASTE DISCHARGE REQUIREMENTS FOR:**

**GENERAL CHEMICAL WEST, LLC
GENERAL CHEMICAL PITTSBURG PLANT
PITTSBURG, CONTRA COSTA COUNTY**

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter the Water Board), finds that:

1. General Chemical Corporation owned and operated an electronic grade chemical manufacturing plant located at 501 Nichols Road, Pittsburg, Contra Costa County. The facility manufactured electronic grade chemicals (i.e. HCl, HF, HNO₃, H₂SO₄, CH₃COOH, NH₄OH, and H₃PO₄) and aluminum sulfate (alum).
2. On June 19, 2002, the Water Board adopted National Pollutant Discharge Elimination System (NPDES) Permit No. CA0004979 for General Chemical Corporation through Order No. R2-2002-0071. Order No. R2-2002-0071 permitted the discharge of an average long term flow rate of up to 0.31 million gallons per day (MGD) of treated industrial process wastewater, non-contact cooling water and on-site storm water from an unlined lagoon to Suisun Bay.
3. On September 22, 2003, General Chemical West LLC (Discharger) acquired ownership of the facility and its discharges. The Discharger is responsible for complying with NPDES Permit No. CA0004979 (Order No. R2-2002-0071).
4. Over the course of the permit term, effluent limitations were violated 38 times. Mandatory Minimum Penalty (MMP) Complaints Nos. R2-2003-0081 (4 violations), R2-2004-0053 (16 violations), and R2-2005-0060 (11 violations) addressed 31 of the violations. The Water Board will address the 7 remaining effluent violations under a separate enforcement order. The sediments in the unlined lagoon have been linked to some of these violations (e.g., mercury and arsenic). The Discharger stated in its Pollution Prevention and Minimization Annual Report, dated February 16, 2005, that known soil contaminants, both onsite and in the surrounding facilities, include arsenic, total chromium, lead, mercury and selenium. Thus, the Discharger stated that leaching of contaminants by groundwater from soils surrounding the lagoon is a likely vector for water contamination in lagoon effluent. As set forth above, Order No. R2-2002-0071 only authorized the discharge of process wastewater, non-contact cooling water, and on-site storm water from the unlined lagoon, not groundwater and its contaminants.

5. The Discharger's effluent has materially changed since it was permitted under Order No. R2-2002-0071, and the Discharger has and will likely continue to violate its permit. Due to the Discharger's reduced flow of industrial process wastewater to the unlined lagoon, lower water levels in the lagoon will likely allow more seepage of groundwater contaminated with arsenic, total chromium, lead, mercury and selenium from surrounding facilities, as stated in the Pollution Prevention and Minimization Annual Report, dated June 8, 2007. Additionally, the lower water level also has a greater potential to expose and resuspend contaminated sediments in the lagoon (described in Finding No. 4). The reduced flow has increased the residence time of the water in the lagoon, which causes pollutants to concentrate in lagoon water.
6. If Order No. R2-2002-0071 were to be updated and reissued to comply with applicable and more stringent standards for toxic pollutants, current discharge data (e.g., selenium) show that the existing treatment systems will not be able to comply with the more stringent limits.
7. The Discharger stated in its Pollution Prevention and Minimization Annual Report, dated February 21, 2003, that it would implement measures to cease discharge. These measures include reducing cooling water use and routing the remaining process wastewater to Delta Diablo Sanitation District. The Discharger is 95% complete with the construction of a sewer line to route industrial process wastewater to Delta Diablo Sanitation District's sewage collection system. The Discharger stated in a letter, dated August 23, 2007, that it will terminate all discharge of process industrial wastewater to the lagoon by October 1, 2007. Additionally, the Discharger indicated that it will complete the construction of a storm water line to route storm water from process areas of the facility directly to Suisun Bay by December 1, 2007. Therefore the industrial storm water discharge will not be affected by the sediments in the unlined lagoon, and can thus be covered under the State Water Board's Industrial Activities Storm Water General Permit, Water Quality Order No. 97-03-DWQ. Storm water discharge using this new system will commence as soon as the system is tested and operational.
8. To ensure compliance with the current NPDES permit, the Discharger has committed to the testing and implementation of additional lagoon water treatment measures prior to resumption of discharge, and Water Board notification prior to discharge of lagoon water to Suisun Bay. Also, to more fully characterize the changing nature of the discharge during this interim period while the lagoon is being readied for closure, the Discharger has committed to the monitoring of arsenic, copper, cyanide, lead, mercury, nickel, selenium, and fluoride for each discharge event, in which a discharge event cannot exceed a 24-hour period. This more intensive monitoring will provide data to determine compliance with both permit effluent limits and permit receiving water limits. These receiving water limits prohibit discharges that harm beneficial uses or that cause violations of applicable water quality standards. Finally, to avoid the possibility of dam failure at low lagoon water levels, the Discharger will limit the lower level of the lagoon to 30 inches as measured by the lagoon measurement gauge and provide a structural engineering assessment of the dam to the Water Board.

9. This Order terminates NPDES Permit CA0004979 effective April 30, 2008, except for enforcement purposes. Though the Water Board finds that earlier termination is warranted owing to the recent permit violations and material changes to the discharge, the Discharger has asked that this later date be allowed in order to allow the Discharger to ready the lagoon for closure next summer under the oversight of the Department of Toxic Substances Control. In part, this allows for the discharge of the coming wet season's rain that falls directly on the lagoon and its immediate vicinity. In consideration of the commitments made by the Discharger to improve and better characterize the quality of the discharge (see Finding No. 8), and the Discharger's need to ready the lagoon for closure, this Order specifies the April termination date.
10. The Water Board has notified the Discharger and interested agencies and persons of its intent to terminate waste discharge requirements, and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
11. The Water Board, in a public meeting, heard and considered all comments pertaining to the termination of waste discharge requirements for the above discharge.

IT IS HEREBY ORDERED, pursuant to provisions of the Clean Water Act and Division 7 of the California Water Code, and the regulations, and plans and policies adopted thereunder, that Order No. R2-2002-0071 is terminated effective as of April 30, 2008, except for enforcement purposes for violations prior to this date.

I, Bruce H. Wolfe, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Region on September 12, 2007.

Bruce H. Wolfe
Executive Officer